

Date: Tue, 3 Aug 93 11:44:11 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #941
To: Info-Hams

Info-Hams Digest Tue, 3 Aug 93 Volume 93 : Issue 941

Today's Topics:

 Daily Solar Geophysical Data Broadcast for 30 July
 Emergency Power Off (3 msgs)
 New 97.113 Text (2 msgs)
 QSL INFO: DF3GY & ES1WN
 Radio Ship II
REQUEST FOR CONTRIBUTIONS: radio, scanner mod archive (3 msgs)
 STILL waiting for your license? Read this and weep!
 WB1GOF back on the air!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 3 Aug 93 17:28:26 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 30 July
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 211, 07/30/93
10.7 FLUX=097.9 90-AVG=107 SSN=051 BKI=3211 1111 BAI=005
BGND-XRAY=B1.2 FLU1=7.6E+04 FLU10=1.1E+04 PKI=3211 2122 PAI=006
BOU-DEV=025,012,005,006,008,006,008,006 DEV-AVG=009 NT SWF=00:000
XRAY-MAX= B2.8 @ 1628UT XRAY-MIN= B1.1 @ 2206UT XRAY-AVG= B1.3
NEUTN-MAX= +002% @ 2230UT NEUTN-MIN= -003% @ 1430UT NEUTN-AVG= -0.6%
PCA-MAX= +0.1DB @ 1325UT PCA-MIN= -0.5DB @ 0605UT PCA-AVG= -0.1DB
BOUTF-MAX=55373NT @ 2353UT BOUTF-MIN=55342NT @ 1735UT BOUTF-AVG=55363NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
GOES6-MAX=P:+108NT@ 1416UT GOES6-MIN=N:-092NT@ 0201UT G6-AVG=+087,-018,-052

FLUXFCST=STD:100,100,110;SESC:100,100,110 BAI/PAI-FCST=010,010,010/010,010,010
KFCST=2223 1222 2223 1222 27DAY-AP=020,009 27DAY-KP=5442 3223 *333 1223
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 29 JUL 93 was 73.1.
The Full Kp Indices for 29 JUL 93 are: 2o 1o 2o 3- 3o 3+ 4+ 3-

Date: 3 Aug 93 13:55:21 GMT
From: ogicse!emory!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: Emergency Power Off
To: info-hams@ucsd.edu

In article <CB5C1G.KoM@srngenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:

>Gary Coffman (gary@ke4zv.uucp) wrote:

>

>: We call it a GFI, Ground Fault Interrupter.

>

>: Our 110 volt residential wiring consists of three insulated wires, the

>: hot (black), the neutral (white), and the safety ground (green). The

>: safety ground *can* be bare under certain conditions, but the other

>: two are insulated. The safety ground and the neutral lead must be

>: connected together at the distribution panel, where they're both

>: connected to Earth ground, but they aren't supposed to be connected

>: together anywhere else

>..

>: A GFI is configured to measure current flow in this

>: third wire. If it exceeds a minimum value, it trips the hot lead

>: out of circuit.

>

>I thought that the GFI measured the differential current in the hot and
>neutral wires. If the GFI sensed ground-lead current, then if you touch a
>"hot" wire while standing on earth ground (swimming pool, for example),
>the GFI would not trip. (Since the return current would be through the
>earth, not the safety ground.)

You are correct. The GFI uses a balanced transformer to sense differences
in current flow between hot and neutral. They're set to trip with a 5 ma
difference. As you note, the fault current doesn't have to flow through
the safety ground wire, though it will in most equipment faults, hopefully
before you touch it. I stated it's action incorrectly above.

>: Our 220 volt systems can be more complex. They can be either single
>: phase, or one of two different varieties of three phase. In residential
>: wiring single phase is normally used and all three wires usually carry

>: current. Two of the wires are "hot" and one is neutral. From either hot
>: wire to neutral, you get 110 volts. From one hot wire to the other, you
>: get 220 volts. Note the absence of a separate safety lead.
>
>This brings up an interesting question: My (old) electric stove has a
>3-prong 220V plug on it. It also has a 3-wire 110V AC outlet for plugging
>in your coffee pot or whatever. I assume the 110V outlet's neutral and
>safety ground leads must just be wired together to 220V neutral. Isn't
>this some kind of violation of the electrical code?

It's permitted under 250-60 of the NEC.

"Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the circuit for these appliances shall be grounded in the manner specified by Section 250-57 or 250-59; [a wired safety ground -GC] or, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor [neutral -GC] if all of the conditions indicated in (a) through (d) below are met.

- (a) The supply circuit is 120/240 volt, single phase, 3-wire.....
- (b) The grounded conductor is not smaller than No. 10 copper or No. 8 aluminum.
- (c) The grounded conductor is insulated.....
- (d) Grounding contacts of receptacles furnished as part of the equipment are bonded to the equipment."

>: Ideally, loads are balanced so no *net* current flows in the neutral lead,
>: thus it can be considered "ground", but this rarely happens in practice.
>
>I assume that's the way my stove works. There would be no reason to wire
>the burners to the third wire. For sure my linear amplifier doesn't put
>current into the third lead. What kind of 220V load would intentionally
>draw current from the neutral lead?

The clock in your stove does. It taps 110 volts by going across one hot and neutral. Any appliance, like a hand mixer, that you plug into the stove outlets also causes imbalance. In circuits where mixed 110 and 220 voltages are required, load imbalances are common, and unavoidable. In circuits with pure 220 volt loads, there should be no imbalance. It can happen with certain industrial motor controllers, however, but shouldn't ever occur when the equipment is transformer isolated. Imbalances are almost always found in distribution systems where 110 and 220 loads are tapped off the 3-wire system. It's practically impossible to maintain balance when there are switched 110 volt loads in the system.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 3 Aug 93 17:18:56 GMT
From: news-mail-gateway@ucsd.edu
Subject: Emergency Power Off
To: info-hams@ucsd.edu

Just to set the record straight, electrical services in the US in residential areas are 240/120 volt single phase as defined by the REA and ANSI (not 220/110 which is a fifty year old standard and obsolete).

One ham in Montclair NJ recently had problems with his linear amp not putting out full rated power. I went over to measure the 240 volt line and measured 199 volts !. Then I measured 113 v.a.c. from each hot lead to neutral...hmmmm. After contacting PSE&G Co., I found out that they have so called 208 service in that residential area, e.g. 2 phases of a three phase system. The reason they did this was to save duplicity of installing single phase and three phase distribution in a mixed business and residential area where there are 208 "Y" 3 phase customers. We subsequently installed a buck/boost auto-transformer in the shack wired to boost the 199 volts. Now he has 235 volts under load and the amplifier is happy.

Back to the discussion of others, per NEC NFPA-70 (1993) article 230-2, only *ONE* service entrance is permitted in a single family dwelling and per article 250-22 grounding is required for a service at the panel where the main disconnecting means. Also, on branch circuits the neutral *cannot* be used as a ground, except for electric ranges and ovens. This is because the lines to ovens and ranges are a direct run to the panel(s) where neutral grounding is derived. Where the supply cable attaches to the electric range, that point becomes an "extension" of the service entrance panel bus (article 250-60). The code permits the use of SE type cable (usually a 50 or 60 amp. rated service entrance cable) for electric ranges. In fact, this is one of the few places where the code permits the use of SE cable for inside wiring. It's usually only permitted for service entrance purposes (article 250-60 fig. 250-20). Article 338-3 cover exceptions and limited use of SE and USE cables.

On branch 120 va.c. branch circuits the neutral can be several

volts above ground depending on load characteristics. The ground, whether it's the metal conduit or the bare wire in NM (romex) cable is there for safety only and intended to carry fault currents only. Ideally, the current flow in the grounds in all the household branch circuits should have no potential on them at all except for small leakage current induced voltages.

Seth T. KC2WE

Date: 3 Aug 1993 17:25:42 GMT
From: usc!math.ohio-state.edu!darwin.sura.net!mojo.eng.umd.edu!
chuck@network.ucsd.edu
Subject: Emergency Power Off
To: info-hams@ucsd.edu

In article <CB5qzJ.6q7@srgenprp.sr.hp.com> mikew@sad.hp.com (Mike Weihman) writes:
>Regarding 220V wiring: I believe the requirement of the NEC is that
>you may run three wire 220 (hot1-hot2-gnd) ONLY if the appliance has
>no 110 volt circuits; hence Al's stove is a flagrant violation...
>presumably the code was a bit more lenient once upon a time. Many
>electric clothes dryers are hooked up this way with 3 prong plugs.

Well, NEC disagrees with you. Article 250-60 says:

"Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and _outlet_or_junction_boxes_ which are part of the circuit for these appliances shall be grounded in the manner specified by Section 250-57 or 250-59; or, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the _grounded_circuit_conductor_ if all of the conditions indicated in (a) through (d) below are met.

(a) The supply circuit is 120/240-volt single phase, 3-wire; or 208Y/120 volt derived from 3-phase, 4-wire, wye-connected system.

(b) The grounded conductor is not smaller than No. 10 copper or No. 8 aluminum.

(c) The grounded conductor is insulated; or the grounded conductor is uninsulated and part of Type SE service-entrance cable and the branch circuit originates at the service equipment.

(d) Grounding contacts of recepticals furnished as part of the equipment are bonded to the equipment."

So you see, NEC says it is OK to connect the frame of your stove to the "grounded circuit conductor" (the neutral wire for 220), and to connect 115v recepticals between the "grounded circuit conductor" and a hot lead, so long as the receptical's grounding contact is grounded to the frame of the stove.

Always best to go to the source.

Chuck Harris - WA3UQV

Date: Tue, 3 Aug 1993 16:41:03 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!jws@network.ucsd.edu
Subject: New 97.113 Text
To: info-hams@ucsd.edu

Jon Gefaell (jeg7e@livia.acs.Virginia.EDU) wrote:

> If that's the real McCoy, then we've been told a lie by _someone_

> This version makes NO MENTION of increased scope of operations by ARES/RACES
> type operators at Public Service events. The whole purpose of the rulemaking
> was supposedly to allow for a codified sanction of the types of traffic we're
> carrying now ("Startline to NCS, we're out of T-Shirts here", "Rest 3 to NCS,
> the officials here would like some more blah blah blah", etc...)

You have to compare this with the "old" 97.113. The key is what's gone -- there is no longer language that prohibits amateurs from providing communications if they could have been provided by other services, or if the the business interests of any party are advanced. The FCC's NPRM text specifically mentions that the objective of deleting that language was to allow greater public service participation, as well as permit amateurs to conduct some (non-regular) personal business on the air. Ordering food, transportation, lodging, and supplies was specifically mentioned in the NPRM as now being allowed. With the exception of the use of the slippery word "regular", the new 97.113 is much improved over the old version.

John Schmidt, NK0R
jws@fc.hp.com

Date: Tue, 3 Aug 1993 16:37:34 GMT
From: csus.edu!netcom.com!steve@decwrl.dec.com
Subject: New 97.113 Text
To: info-hams@ucsd.edu

In article <CB6qqw.5GI@murdoch.acc.Virginia.EDU>, jeg7e@livia.acs.Virginia.EDU (Jon Gefaell) writes:

> In article <CB60oB.EnM@feenix.metronet.com> marchbg@feenix.metronet.com (Marc Grant) writes:

> >

> >The following is the 1993 change to FCC rule 97.113

>

> > [purported full text as ammended deleted]

>

> If that's the real McCoy, then we've been told a lie by _someone_

>

> This version makes NO MENTION of increased scope of operations by ARES/RACES
> type operators at Public Service events. The whole purpose of the rulemaking
> was supposedly to allow for a codified sanction of the types of traffic we're
> carrying now ("Startline to NCS, we're out of T-Shirts here", "Rest 3 to NCS,
> the officials here would like some more blah blah blah", etc...)

You apparently don't see the big difference here!

To paraphrase the new 97.113 (I haven't committed it to memory yet ;-)
unless you are DIRECTLY employed by the sponsor, i.e. this is the way
you make a living, then the communication on behalf of the sponsor to
deal with logistics, et al is just fine.1

This is a radical improvement from point of view. As an OO I had to use
a pretty black and white/conservative definition of what was allowed when
discussing "business" communications with other amateurs. Now things are
ALOT simpler/easier to understand.

Steve KA6S

Date: 3 Aug 93 10:50:41

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-
state.edu!darwin.sura.net!news-feed-2.peachnet.edu!umn.edu!lynx.unm.edu!

dns1.NMSU.Edu!opus!forozco@network.ucsd.edu

Subject: QSL INFO: DF3GY & ES1WN

To: info-hams@ucsd.edu

The title says is all. I need the QSL info for DF3GY and for ES1WN.
I worked these stations about three or four nights ago, and I don't
have a callbook.

Any info would be greatly appreciated. 73's de Luis
forozco@dante.nmsu.edu

--

Luis F. Orozco N 5 U H B
forozco@dante.nmsu.edu g o o
forozco@freedom.nmsu.edu l m y
 y e

Date: 3 Aug 1993 11:35:54 -0400
From: dorsai.dorsai.org!dorsai.dorsai.org!not-for-mail@uunet.uu.net
Subject: Radio Ship II
To: info-hams@ucsd.edu

-=> In a message to All on 08-02-93 19:48, Sorgatz@avatar.tti.com said: <=-

So> Excuse me, "Big Steve", but what the F@#\$ does this have to do with
So> Amateur Radio?? Nothing, that's what...why not post such exciting (??
So> to someone, I'm sure!) news to alt.radio.pirate(s) or whatever that
So> group is that deals with commercial-band bootleggers...it's really
So> a point of netiquette - Postings here should be Amateur Related.

1-Posting was made as an FYI, there ARE hams that do listen to other things
than plain rag chews or "my rig is better than yours" debates.

2-The station hopes to be licensed, doesn't sound like a pirate wannabe to
me, but it was crossposted on that newsgroup and a few others as well.

3-If you post a complain about an "off topic" message, you are also posting
an off topic message. Only one other person, of the thousands that
subscribe to r.r.a.m. complained. He was not egocentric enough to post it,
he did it by E-Mail. Unfortunately, E-Mail doesn't work well here with my
offline reader, so I have to post my reply.

So>that aside, your show stinks! Get a job, buy a life, rent some friends!

If you can't do anything but insult, then you prove that your complaint was
invalid in the first place. Only people with low IQ's tend to insult
and/or curse. Obviously you didn't understand the original message, it was
beyond your comprehension.

___ Blue Wave/QWK v2.12

Date: 3 Aug 93 15:59:11 GMT
From: ogicse!uwm.edu!linac!att!cbnewse!parnass@network.ucsd.edu
Subject: REQUEST FOR CONTRIBUTIONS: radio, scanner mod archive
To: info-hams@ucsd.edu

bruno@McRCIM.McGill.EDU (Bruno Hall) said:

> As a service to the net-aware ham community, we have created an
> anonymous ftp site to hold modification instructions ...

> We are unaware of any site which offers such a service at this time.
> If informed otherwise, we shall actively seek out their entire
> collection(s), and add it to ours.

Why do you want to duplicate the other ftp sites?

--

=====
Copyright 1993, Bob Parnass, AJ9S
AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

Date: Tue, 3 Aug 1993 16:48:07 GMT
From: pravda.sdsc.edu!news.cerf.net!usc!sol.ctr.columbia.edu!news.unomaha.edu!
cwis!pschleck@network.ucsd.edu
Subject: REQUEST FOR CONTRIBUTIONS: radio, scanner mod archive
To: info-hams@ucsd.edu

In <CB6xqr.xo@cbnewse.cb.att.com> parnass@cbnewse.cb.att.com (Bob Parnass, AJ9S)
writes:

>bruno@McRCIM.McGill.EDU (Bruno Hall) said:

> > As a service to the net-aware ham community, we have created an
> > anonymous ftp site to hold modification instructions ...
>
> > We are unaware of any site which offers such a service at this time.
> > If informed otherwise, we shall actively seek out their entire
> > collection(s), and add it to ours.

>Why do you want to duplicate the other ftp sites?

I was about to ask the same question, but Bob beat me to it.
Duplication is not necessarily bad (mirroring assures redundancy in case
of site failure, and allows one to retrieve the data from the closest

site). However, duplication of effort without coordinating with other existing efforts is undesirable. I can't stop you, of course, but you should be aware of other existing efforts to archive mods and their successes and pitfalls.

If you read my "Index to the rec.radio.amateur.* Supplemental Archives" (check rec.radio.info, news.answers, ftp to rtfm.mit.edu and get the file /pub/usenet/news.answers/radio/ham-radio/archives, or send E-mail to mail-server@rtfm.mit.edu and put "send usenet/news.answers/radio/ham-radio/archives" in the body), you'll notice quite a number of ftp and archive sites, many of which have mods directories.

The FAQ (replace "archives" with "faq/part2" in the above directions) also has mods site info. Mods are also posted to rec.radio.info (and usually cross-posted to rec.radio.amateur.equipment, with followups directed there), and archived at the various rec.radio.info archives (Check the informational posts on rec.radio.info for more information).

So, there are plenty of archive sites and forums for mods. What is missing is a lot of submitted mods (as these are all voluntarily maintained), and much verification of whether they are correct or not (a recent April-Fools joke about how to modify the Realistic HTX-202 was not only incorrect, but unknowing owners could have damaged their radio trying to apply it).

Again, take this all under consideration, and proceed as you wish. I like volunteerism on the net and try to encourage it in any way I can, provided it's reasonably coordinated and doesn't substantially duplicate existing effort. On that note (one more blatant plug, and I'll leave the net alone :-), anyone interested in making coordinated, voluntary contributions to this newsgroup and its associated informational postings and archives, is welcome to join the rra-wg (rec.radio.amateur Working Group) mailing list. Feel free to introduce yourself, describe your projects, or just lurk. To subscribe, send E-mail to rra-wg-request@amdahl.com.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Date: 3 Aug 93 13:32:14 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: REQUEST FOR CONTRIBUTIONS: radio, scanner mod archive
To: info-hams@ucsd.edu

In article <23ludi\$mob@Thunder.McRCIM.McGill.EDU>, bruno@McRCIM.McGill.EDU

(Bruno Hall) wrote:

> As a service to the net-aware ham community, we have created an
> anonymous ftp site to hold modification instructions for ham radios
> and scanners, the use of which result in extended RX (and
> possibly TX) ranges, and/or other "interesting" features.
>
> We are unaware of any site which offers such a service at this time.
> If informed otherwise, we shall actively seek out their entire
> collection(s), and add it to ours.

Bruno-

There are quite a few such sites. It isn't unusual to find a "mods" subdirectory at an ftp site with Ham files. They all seem to have the same basic collection of mods. These same files are also found on several packet radio "mods servers".

One site you should check out: atlas.eetech.mcgill.ca, in the directory, /pub/ham-radio/mods.

73, Fred, K4DII

Date: 3 Aug 1993 09:58:13 -0700
From: techbook.com!techbook.com!not-for-mail@uunet.uu.net
Subject: STILL waiting for your license? Read this and weep!
To: info-hams@ucsd.edu

Steve Popovich (popovich@cyclades.ma30.bull.com) wrote:

: Given the relative performances of the VEC and the DXCC Desk lately,
: it seems that either the VEC staffers have been working on DXCC, or
: they've been spending a lot of their time making STRONG coffee to keep
: those DXCC guys working. :-) Congratulations to the League on clearing
: the DXCC backlog; now, how about clearing the license backlog? Then,
: if they'd only send some of that coffee to the NYC/LI Section Manager
: to get him to answer his mail more often than once every couple of
: months...:-) [Is this a common problem with SCMs? Volunteering and
: then deciding they don't want the job?]

: It seems like priorities are being misplaced when license applications
: sit around longer than award applications that require at least 100
: @#\$\$%* QSL cards to be hand-checked. Sigh.
: -Steve, WB3I

THERE you have it! First Things First at the ARRL,
The Association for Retarding Radio Licensing!

Gene

x
--

Those who beat their swords into plowshares
are destined to plow for those who don't.
genew@techbook.COM

Please direct flames to: genew@ucant.gethere.frmhere

Date: 3 Aug 93 12:44:38 GMT
From: news-mail-gateway@ucsd.edu
Subject: WB1GOF back on the air!
To: info-hams@ucsd.edu

Due to a combination of equipment failure and vacation schedules, the WB1GOF station on 146.52 MHz was off the air for the past two weeks. The problem has been resolved and the * tone-decoder has been restored.

The WB1GOF station has been serving the needs of the mobile amatuer radio operator in northeastern Massachusetts continuously since 1978 and it's supporting organization, The Police Amatuer Radio Team of Westford, is committed to keeping the station on the air for emergency communications requirements.

Below is the procedure for accessing WB1GOF. Please pass this information freely so that hams that traverse our area will be in immediate contact with emergency services when needed.

PART also provides emergency autopatch capabilities via the WB1GOF repeater on 442.450 MHz. If you are interested in those details, please feel free to contact the originator of this message. This repeater has coverage throughout eastern and central Massachusetts, southern New Hampshire and northern Rhode Island.

-----cut her
e-----

WB1GOF - *146.52

You've seen the blue signs on the highways in and around northern Massachusetts... what do they mean? WB1GOF is a cooperative service (and the club call) provided by the Police Amateur Radio Team (PART) of Westford, Massachusetts and the Westford Police Department. This station is available to all hams who commute within the stations receiving area on the simplex frequency of 146.52 MHz.

Accessing WB1GOF is simple.....

- Using the Touch-Tone encoder on your rig, press the * for 2 to 3 seconds and then call WB1GOF followed by your call.
- Some one will then answer your call.
- Give precise information, not glorified by all the "gory" details.
- If you are not able to give a mile marker or exit number, give the closest land mark and direction of travel.

It will sound like this:

KA8SCP: * (tone for 3 seconds) "WB1GOF this is KA8SCP"

WB1GOF: "This is WB1GOF, go ahead with your emergency message."

KA8SCP: "Reporting a 2 car accident, with injuries, 495 northbound at Exit 32, Boston Road just after the the exit ramp."

WB1GOF: "Roger, accident with injuries, 495 north at Boston Road just after the exit ramp"

p. We'll send a cruiser (or "State Police will be notified") right away.

WB1GOF out."

Make sure to keep your transmission as brief and yet precise as possible.

WB1GOF may request that you repeat your call sign.

Please repeat your call using "standard" phonetics! Not the "cute" ones!

-----cut here-----

73 for now.... c u on the shortwaves

Terry Stader - KA8SCP

America Online Ham Radio Club Host

Internet: tstader@aol.com (e-mail) or

p00489@psilink.com (binaries/files >28K)

KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

ka8scp@ka8scp.ampr.org [44.56.4.82] Mac

ka8scp-1@ka8scp-1.ampr.org [44.56.4.120] DOS Clone

(they're BOTH pc's!)

End of Info-Hams Digest V93 #941
